SOLAR ROADSIGN
(SOLESTRIAN/SOLAR METRO-FLEX)
USER MANUAL

IMPACTrecovery SYSTEMS
"Performance for a Safer Tomorrow"

General

The Solar Roadsign product consists of several parts. The Top Housing, which contains the solar panels as well as the control board. This housing is clear and must remain unobstructed from daylight. Internal to the bollard is the LED light source behind translucent retro-reflective material. Also inside the bollard is a lithium-polymer battery, which stores charge received from sunlight, and powers the LED at night.

Initial Set-Up

The Solar Roadsign is shipped in a de-activated mode. This is to prevent the battery from discharging during shipment. Once installed on the roadway, the sign must be activated. There are three modes to the solar system:

1. Transport (de-activated) Mode
2. On – Solid
3. On – Flashing

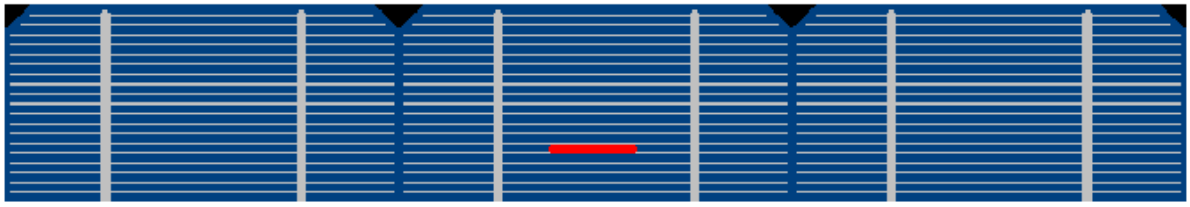
In order to change modes, a magnet must be used to activate a switch located under the solar cell array. Place a magnet over the area indicated in red in the below figure for approximately 5 seconds, and the LED will flash to indicate a mode change. A single flash indicates that the sign is now off and in Transport mode. A double flash indicates Solid mode. A triple flash indicates the sign is now in Flashing mode.

Do not store the magnet on the switch, as prolonged exposure will rapidly discharge the system.

There are two possible locations for the magnet, depending on the version of solar system. For versions with a black top, the magnet is located on the far side of the solar cells as shown below.

Solar Roadsign
(Top View)

For all later versions, those with a clear top, the switch is located in the center of the solar cell arrangement, as follows:



SWITCH

Operation

The Solar Roadsign illuminates automatically based on the amount of light received by the solar cell array. The sign will turn on at dusk and turn back off at dawn. The amount of light needed to turn off the LED is approximately that of a dim room. Storing the sign in a dim room while still in an operating mode could cause the sign to completely discharge.

In On – Solid mode, the sign will illuminate after several seconds when light is below threshold, and stay lit. In On - Flashing mode, the light will flash on for 0.5 seconds, then off for 0.5 seconds. A note about Transport mode: the sign will neither turn on, nor charge the batteries in this mode.

This sign uses patented technology to charge in very low light, even overcast skies. From full charge without any additional charging, you can expect the following minimum performance:

Single Sided Sign – Steady On	240 hours
Single Sided Sign – Flashing	480 hours
Double Sided Sign – Steady On	120 hours
Double Sided Sign – Flashing	240 hours

Charging of the battery can be negatively affected by extreme cold temperatures, however even with reduced charging, there are ample reserves to power the Solar Sign through winter months. Battery life is rated at 5 years.

Care

Placement and location of the sign will be of utmost importance for longevity. Although this sign is able to withstand some limited vehicle strikes, high speed, violent, or crushing strikes will risk the electronics inside. When at all possible, place the sign in areas that are least likely to be struck by vehicle traffic. Examples of this are beyond speed bumps, on curbs or islands, or in very slow speed areas such as school or airport drop-offs. Remove the sign when not in use. If the lighting of the sign does become inoperative, the retro-reflective material of the sign will continue to give adequate conspicuity and messaging.

For proper charging, it is important to keep the solar panels unobstructed. The cells are covered with a tough acrylic plastic; however harsh solvents should not be used to clean it as those may haze the clear plastic. Use a mild soap to clean the top of the sign should it become dirty. If there is a need to scrap off items from the cover, be sure to use care not to scratch the surface.

The Solar Roadsign is weather resistant; however it is not water-proof. Do not install in areas that may flood, or if necessary, remove the sign for storage when in danger of flooding.

Although the Solar Roadsign may take several automobile strikes and continue operating, it is best to install the sign in a location which will protect it from strikes as much as is possible. Typical installations are low speed streets and parking lots, on raised curbs, near speed bumps, and manned pedestrian crossings.

Further Information

For more information see our website at www.impactrecovery.com or www.impactrecovery.eu or call us at 1-800-736-5256.